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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,845	06/01/2004	Jeng-Yih WU	NAUP0563USA	3844

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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

REHM, ADAM C

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,845

Applicant(s)

WU ET AL.

Examiner

Adam C. Rehm

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-4,7-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 7, 9, 10, 17 and 18 are rejected under 35 U.S.C. 102(b) as being unpatentable over MASUMOTO (US 5,418,583) and O'BRIEN ET AL. (WO 03/064919).

MASUMOTO discloses a projector (Column 1, Lines 6-14) comprising:

- A light source (1);
- A first lens array positioned on a side of the light source (4, Fig. 16);
- An invisible-light/UV/IR cut filter being non-parallel with the first array (105);
- A second lens array positioned on the same side of the light source as the first lens array (5); and
- A light source housing/reflector (3).

2. MASUMOTO discloses the claimed invention, but does not disclose an invisible-light/UV/IP cut filter having an included angle of about 11-45 degrees. However, O'BRIEN teaches arranging an IR filter at an angle of about 11 to 45 degrees (Fig. 2) for the purpose of preventing reflection of light back to the light source and thus avoiding damage to the light source (Page 4, Paragraph 3). It would have been obvious to one of ordinary skill in the art at the time of invention to modify MASUMOTO and use the

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angled IR filter as taught by O'BRIEN in order to avoid the reflection of damaging light back to the light source.

3. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over MASUMOTO (US 5,418,583) as applied to claim 1 above, and further in view of applicant's admitted prior art. MASUMOTO discloses the claimed invention, but does not specifically disclose a PS converter or a high-pressure mercury lamp light source. However, applicant admits that prior art projectors use PS converters for polarizing light beams (Page 2, Lines 9-10, Fig. 1) and high-pressure mercury lamps (Page 2, Lines 11-14), which are commonly used in projectors due to well-known properties including high lumens, long life, color constancy and low cost. It would have been obvious to one of ordinary skill in the art at the time of invention to modify MASUMOTO and use the PS converter and mercury lamp as taught by applicant in order to polarize light beams from an efficient light source.

4. Claims 11, 13-16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over MASUMOTO (US 5,418,583), WEI ET AL. (US 2004/0145710). MASUMOTO discloses a projector (Column 1, Lines 6-14) comprising a light source (1); a first lens array positioned on a side of the light source (4, Fig. 16); a second lens array positioned on the same side of the light source as the first lens array (5); an invisible-light/UV/IR cut filter being non-parallel with the first array and between the first and second arrays (105); and a light source housing/reflector (3). MASUMOTO does not disclose an invisible-light/UV/IR cut filter positioned at an acute angle to the first array. However, O'BRIEN teaches arranging an IR filter at an angle of about 11 to 45 degrees

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(Fig. 2) for the purpose of preventing reflection of light back to the light source and thus avoiding damage to the light source (Page 4, Paragraph 3). It would have been obvious to one of ordinary skill in the art at the time of invention to modify MASUMOTO and use the angled IR filter as taught by O'BRIEN in order to avoid the reflection of damaging light back to the light source.

Response to Amendment

5. Applicant's amendment has been received.

Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACR
4/18/2006


THOMAS M. SEMBER
PRIMARY EXAMINER